

CLAIMS

What is claimed is:

1. An electromechanical program timer with delay sections capable of actuating at least a contact switch for controlling electrical actuators connected thereto, comprising at
5 least:

driving means for providing a rotational power;

a driving shaft, driven by said driving means, having an eccentric shaft and a driving gear;

- 10 a main driven gear, having at least a missing gear portion, rotationally mounted adjacent to said driving shaft for being engaged with said driving gear and driven thereby in a major timing speed;

a cam unit, fixed to said main driven gear, having at least a circular cam track for actuating said contact switch, and a driven ratchet formed with a plurality of ratchet teeth; and

- 15 a pushing pawl, having one end pivotally mounted on said eccentric shaft, and a pawl end engaged with ratchet teeth of said driven ratchet;

when said main driven gear being driven to said missing gear portion, said pushing pawl activated by said eccentric shaft pushes said driven ratchet moving in a relatively lower timing speed.

- 20 2. An electromechanical program timer with delay sections according to claim 1 wherein said driving means is a motor.

3. An electromechanical program timer with delay sections according to claim 1 wherein said driving shaft further comprises a driven gear engaged with said driving means.

4. An electromechanical program timer with delay sections according to claim 1

wherein said pushing pawl is pressed by a resilient member for maintaining engagement with said driven ratchet.

5 5. An electromechanical program timer with delay sections according to claim 1 further comprises an anti-reverse pawl pivotally mounted on said driving shaft and engaging with said driven ratchet for preventing reverse of said main driven gear.

6. An electromechanical program timer with delay sections according to claim 5 wherein said anti-reverse pawl is pressed by a resilient member for maintaining engagement with said driven ratchet.

10 7. An electromechanical program timer with delay sections according to claim 1 wherein each of said circular cam track comprises at least a ramp, peak and valley for activating and turning on and off of an electrical actuator connected thereto.

8. An electromechanical program timer with delay sections according to claim 1 wherein said cam unit is a disk having a plurality of circular cam tracks formed on at least one side of said disk.

15 9. An electromechanical program timer with delay sections according to claim 1 wherein said ratchet teeth are formed with suitable pitch for accommodating said lower timing speed.